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U.S. Department
of Transportation

East Building, PHH-30
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 15652
(THIRD REVISION)

EXPIRATION DATE: January 31, 2019

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Vertical Solutions LLC
Valdez, AK
Certification number: Part 135 3VSA165N;
Part 133 3VSL165N
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of certain hazardous materials by cargo aircraft, including 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the US only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
 - b. The safety analyses performed in the development of this special permit only considered the hazards and risks associated with the transportation in commerce.
 - c. No party status will be granted to this special permit.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.101 Column (9B), § 172.204(c) (3), § 173.27(b) (2) and § 175.30(a) (1) in that the explosives are forbidden by cargo aircraft, §§ 172.200 and 172.300 in that shipping papers and certain marking

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requirements are waived for other than Class 1 materials, Part 173 in that certain packaging requirements are waived, and Part 175.75 in that alternative stowage is authorized.

5. BASIS: This special permit is based on the emergency modification application of Vertical Solutions LLC dated October 24, 2014 submitted in accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Ammonium nitrate-fuel oil mixture	1.5D	NA0331	II
Acetylene, dissolved	2.1	UN1001	N/A
Aerosols, flammable, (each not exceeding 1 L capacity)	2.1	UN1950	N/A
Air, compressed	2.2	UN1002	N/A
Articles, explosive, n.o.s.	1.4S	UN0349	II
Articles, explosive, n.o.s. (pyrotechnic breaking capsule)	1.4C	UN0351	II
Batteries, wet, filled with acid, electric storage	8	UN2794	III
Boosters, without detonator	1.1D	UN0042	II
Butane see also Petroleum gases, liquefied	2.1	UN1011	N/A
Charges, shaped, flexible, linear	1.1D	UN0288	II
Charges, shaped, without detonator	1.1D	UN0059	II

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Hazardous Materials Description			
Proper Shipping Name	Hazard Class/Division	Identification Number	Packing Group
Cord, detonating, flexible	1.1D	UN0065	II
Detonator assemblies, electric	1.1B	UN0030	II
Detonator assemblies, non-electric	1.1B	UN0360	II
Detonator assemblies, non-electric, for blasting	1.4B	UN0361	II
Detonators, electric, for blasting	1.4B	UN0255	II
Diesel fuel	3	UN1202	III
Engines, internal combustion, flammable gas powered	9	UN3166	N/A
Explosive, blasting, type A	1.1D	UN0081	II
Explosive, blasting, type B or Agent blasting, Type B	1.5D	UN0331	II
Explosive, blasting, type E	1.1D	UN0241	II
Explosive, blasting, type E or Agent blasting, Type E	1.5D	UN0332	II
Flammable liquids, n.o.s.	3	UN1993	II
Fuel, aviation, turbine engine	3	UN1863	I
Fuse, safety	1.4S	UN0105	II
Gasoline	3	UN1203	II
Lighters containing flammable gas	2.1	UN1057	N/A

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Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Lighter refills <i>containing flammable gas not exceeding 4 fluid ounces (7.22 cubic inches) and 65 grams of flammable gas</i>	2.1	UN1057	N/A
Lithium ion batteries, contained in equipment including lithium ion polymer batteries	9	UN3481	N/A
Lithium ion batteries, packed with equipment including lithium ion polymer batteries	9	UN3481	N/A
Lithium metal batteries, contained in equipment including lithium alloy batteries	9	UN3091	N/A
Lithium metal batteries, packed with equipment including lithium alloy batteries	9	UN3091	N/A
Methanol	3	UN1230	II
Oxygen, compressed	2.2	UN1072	N/A
Paint related material <i>including paint thinning, drying, removing, or reducing compound</i>	3	UN1263	I
Petroleum distillates, n.o.s. or Petroleum products, n.o.s.	3	UN1268	I
Propane <i>see also</i> Petroleum gases, liquefied	2.1	UN1978	N/A
Rags, oily	4.2	UN1856	III

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Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Trinitrotoluene and Trinitrobenzene mixtures <u>or</u> TNT and trinitrobenzene mixtures <u>or</u> TNT and hexanitrostilbene mixtures <u>or</u> Trinitrotoluene and hexanitrostilbene mixtures	1.1D	UN0388	II
PETN, desensitized with not less than 15% phlegmatizer by mass	1.1D	UN0150	II

* All explosive materials must be approved as required by 49 CFR 173.56.

7. SAFETY CONTROL MEASURES FOR MATERIALS OTHER THAN CLASS 1:

- a. PACKAGING - Prescribed packaging is the manufacturer's original packaging or a packaging of equal or greater strength and integrity. Compatibility and effectiveness of all packaging must, at a minimum, meet the requirements of 49 CFR 173.24.
- b. Aerosols and compressed gases must be secured in an upright position with protective caps and/or covers to prevent any unwanted discharge and be secured against movement incidental to transportation.
- c. Batteries must have their terminals insulated to prevent short circuits.
- d. Liquid fueled or gasoline powered equipment may be filled to not more than 80% of their capacity to allow for expansion due to altitude changes.
- e. Lithium batteries must remain installed in electronic devices. Spare batteries must be separated from other metallic objects by being packed in a sturdy plastic bag. Battery powered equipment must be packaged in a manner that prevents accidental activation.

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f. Propane packaged in DOT 4BW240 cylinders may be transported via approved lifting eyes or in approved netting in accordance with the manufacturer's instructions. Propane packaged in 4B, 4BA, or 4B-240ET approved cylinders may be transported in approved netting in accordance with the manufacturer's instructions. All cylinder(s) must be inspected for leakage, corrosion, denting, bulging, gouging, and fire damage. This inspection shall include the valve, valve protection and around and inside the footing for corrosion and foreign materials. If a cylinder fails any part of the visual inspection it may not be transported until repaired or replaced.

g. Division 4.2 materials must be transported in sealed containers to prevent any spontaneous combustion.

h. The requirements for shipping papers are waived.

i. Each outer packaging must be labeled for the hazardous materials contained within.

j. Materials transported by external load must comply with the safety controls specified in this section.

k. Alternative notification procedures for 49 CFR Part 175.33, may be established subject to the written approval of the cognizant Regional Hazardous Materials Manager.

8. SAFETY CONTROL MEASURES FOR CLASS 1:

a. PACKAGING - As prescribed in § 173.62. When metal outer packages are used a 3-5 foot metal chain or other type of static discharge wick must be fitted to the bottom of the metal box to dissipate the build-up of static electricity.

b. Authorized explosives. Explosives that are forbidden for shipment by air in 49 CFR Parts 100 through 178, may be accepted and transported in cargo aircraft only subject to the conditions stated herein.

c. Maximum weight. Not more than 1,000 pounds total net weight of explosives may be carried in, on, or suspended from the aircraft.

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d. Advance Notice of FAA Regional Hazardous Materials Manager. The operator of the aircraft must notify the Regional Hazardous Materials Manager in the region where the flight will originate. This notification must be given at least 72 hours in advance of plans to operate under the special permit, unless prior arrangements have been made with the cognizant Regional Hazardous Materials Manager. The notification must include the point of departure, intermediate stops, destination(s), and a loading and departure schedule. If a flight schedule deviates more than four hours from the originally scheduled departure time, the operator of the aircraft must notify the cognizant Regional Hazardous Materials Manager. Alternate notification procedures may be established subject to the written approval of the cognizant Regional Hazardous Materials Manager.

e. Advance permission from airport. If an airport is used, the operator of the aircraft must have advance permission from the owner or operator of each manned airport where the material is to be loaded or unloaded or where aircraft is to land while the materials are on board. When the destination is changed after departure because of weather or other unforeseen circumstances, permission from the owner or operator of the alternate airport must be obtained as soon as practicable.

f. Flight plan. The operator of the aircraft must include the following information in the "Remarks" section of each flight plan when the provisions of this special permit are exercised:

(1) The classification of each hazardous material aboard, attached to or suspended from the aircraft.

(2) The net weight of each class of hazardous material aboard the aircraft.

(3) This requirement does not apply to operations where a flight plan cannot be filed (e.g. operating in remote areas or uncontrolled airspace)

g. Loading and unloading. Loading and unloading operations under this special permit must comply with the following:

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(1) The loading and unloading of the aircraft must be conducted at a safe distance from heavily populated areas and from any place of human abode or assembly. However, at an airport where the airport owner or operator or authorized representative thereof has designated a specific location for loading or unloading, the explosives may not be loaded or unloaded at any other location.

(2) Carriage of explosives under this special permit is subject to the same limitations and conditions specified for their transportation by motor vehicle in § 177.835(g) and § 177.848.

(3) During loading or unloading, no person may smoke or carry a lighted cigarette, cigar or pipe, or operate any device capable of causing an open flame or spark within 50 feet of the aircraft.

(4) No fueling operations of the aircraft may be conducted during loading and unloading of the explosives.

(5) A static discharge procedure must be implemented for Class 1 materials.

h. Requirements during operation of aircraft. Operation of the aircraft during takeoff, en route, and landing must be conducted at a safe distance from heavily populated areas.

(1) Before movement of the aircraft prior to take-off, in an airport traffic area, the pilot of the aircraft must notify the control tower of the class(es) of explosive(s) (including ammunition) on board.

(2) The pilot of the aircraft, prior to entering an airport traffic area, must notify the control tower of the amount and class of explosives on board and request this information be relayed to the appropriate airport officials. For airports without control towers, this call must be made to the Flight Service Station nearest the airport of intended landing.

(3) When under radar control during the approach and landing phase, the pilot must request appropriate vectors so as to avoid heavily populated areas.

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(4) Whenever explosives are on board, attached to or suspended from the aircraft, the pilot must ensure that no person on the aircraft may smoke, or carry a lighted cigarette, cigar, or pipe, or operate any device capable of causing an open flame or spark.

i. Pilot requirements. The operator of the aircraft must ensure the following with respect to pilots of aircraft operating under this special permit:

(1) A minimum of two pilots is required aboard any multi-engine aircraft carrying explosives under this special permit.

(2) Each pilot must be provided written instructions outlining any conditions and limitations applicable at each airport of intended use. The name of the official(s) granting the advance permission required by paragraph (g) above must be included in these instructions, except when a landing permit has been granted by an agency of the Department of Defense for landing at a military installation.

(3) Each pilot of an aircraft being operated under this special permit must have received formal training on the requirements of 49 CFR Parts 171-178 that are applicable to his duties and be thoroughly familiar with the specific requirements of this special permit.

j. Attendance of explosives. Division 1.1 and 1.2 explosives must be attended at all times they are in the possession of the operator (from the time of receipt from consignor until time of receipt by the consignee) unless placed in an explosive storage magazine that is approved by the Federal, State or local authority or at a location on a military installation designated by appropriate military authorities. All persons accompanying Class 1 explosives must be BATF Licensed Employees.

k. A copy of the required security plan must be made available to any DOT inspector upon request.

9. SPECIAL PROVISIONS.

a. The aircraft operator must maintain permanent records of each flight during which explosives are carried under the authority of this special permit. This record must be made available at its principal business office

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to representatives of the Federal Aviation Administration and submitted to the Associate Administrator for Hazardous Materials Safety (AAHMS) upon request. The record for each flight must include:

- (1) Name of the shipper(s).
- (2) Name of the consignee(s).
- (3) Origin airport(s).
- (4) En route airport(s).
- (5) Destination airport.
- (6) Shipping name and class of each explosive.
- (7) Net weight of each explosive.
- (8) Name of each pilot and any other person aboard the aircraft.
- (9) Registration number of the aircraft.
- (10) Name of the individual representing the owner or operator of each manned airport who granted advance permission for the aircraft to land or take-off while it was being operated under this special permit.

The record required by this paragraph must be maintained current to within 72 hours of each flight under this special permit.

b. This Special Permit does not grant the authority to use foreign controlled airspace or airports outside the United States.

c. MARKING - The marking requirements of 49 CFR 172.301(c) are waived.

d. This Special Permit does not waive any FAA airworthiness requirements or the need to obtain other required FAA authorizations.

10. MODES OF TRANSPORTATION AUTHORIZED: Cargo only aircraft and Rotorcraft External Load Operations.

11. OPERATIONAL REQUIREMENTS: A current copy of this special permit must be carried aboard each aircraft used to transport materials covered by this special permit.

a. Authorized aircraft. Aircraft used under this special permit must be authorized as part of an FAA part 133 or 135 Operating Certificate.

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- b. Operations manual. FAA part 133 or 135 operations must be conducted in accordance with conditions and limitations specified in the certificate holder's FAA-approved Rotorcraft Load Combination Flight Manual (RLCFM) and Hazardous Material Safety Mitigation Plan.
 - c. Authorized persons aboard aircraft. No person may be carried on the aircraft other than as authorized by 14 CFR 133.35.
12. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—"The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

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13. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 Immediate notice of certain hazardous materials incidents, and 171.16 Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: LaValle/SG